



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,311	04/02/2004	Grant Edward Carlson	STL11717	1862

7590 09/20/2005

David K. Lucente  
Seagate Technology LLC  
Intellectual Property - COL2LGL  
389 Disc Drive  
Longmont, CO 80503

EXAMINER

EDWARDS, ANTHONY Q

ART UNIT PAPER NUMBER

2835

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/817,311	Applicant(s) CARLSON ET AL.	
	Examiner Anthony Q. Edwards	Art Unit 2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/2/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 6-11 and 14-19 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,906,914 to Stamos et al. ("Stamos" hereinafter). Referring to claims 1 and 9, Stamos discloses an array storage system (see Figs. 2A and 2B) comprising a shelf (28) defining a tubular closed passage (see Fig. 4A) with a front-end opening and a back-end opening (not numbered), a front-end partition (28a) adapted for supporting a first component (34) inserted in the front-end, a removable back-end partition (46) adapted for supporting a second component (36) inserted in the back-end, and a removable backplane support (46) adapted for operably supporting a backplane (42) in electrical connection with the first (34) and second (36) components.

Referring to claims 2 and 10, Stamos discloses an array storage system comprising a shelf wherein the removable back-end partition (46) comprises the backplane support. See Fig. 4A and col. 4, lines 10-16.

Referring to claims 3 and 11, Stamos discloses an array storage system comprising a shelf wherein the first component (34) is a multiple disc array. See Fig. 3 and the corresponding specification.

Referring to claims 6 and 14, Stamos discloses an array storage system comprising a shelf wherein the second component comprises a component selected from a group consisting of a data storage device controller (36), a power supply unit, an interface unit, and a battery unit.

Referring to claims 7 and 15, Stamos discloses an array storage system comprising a shelf wherein the backend partition (46) is adapted for supporting a fourth component (38) different than the second component. See Fig. 3 and col. 4, lines 10-16.

Referring to claims 8 and 16, Stamos discloses an array storage system comprising a shelf wherein the fourth component comprises a component selected from a group consisting of a data storage device controller, a power supply unit (38), an interface unit, and a battery unit.

Referring to claims 17 and 19, the method steps are necessitated by the device structure as disclosed by Stamos. See Figs. 3, 4A and 5, as well as the above rejection to claims 1 and 2, respectively.

Referring to claim 18, Stamos discloses a method for electrically connecting components, including removing the backplane and removably inserting a replacement backplane through the back-end opening. See Fig. 3 and col. 4, lines 10-16.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stamos in view of U.S. Patent No. 6,853,551 to Baar et al. ("Barr" hereinafter). Referring to

claims 4 and 12, Stamos discloses the device as substantially claimed, except for the front-end partition supporting a third component different than the multiple disc array. Baar teaches providing a chassis (see Figs. 3 and 4) wherein a front-end partition (16) supports a component (not numbered) different or other than a multiple disc array (see Fig. 4 and col. 5, lines 47-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the tubular closed passage of Stamos to include a front-end partition, which supports a component different from a multiple disc array, as taught by Baar, since the device of Baar would provide a higher component slot density for the front-end partition of Stamos (i.e., allow for other modules such as power supplies to be housed therein), while maintaining the same form factor size conditions.

Referring to claims 5 and 13, Stamos in view of Baar disclose an array storage system comprising a shelf wherein the third component comprises a component selected from a group consisting of a data storage device controller, a power supply unit, an interface unit, and a battery unit. See col. 5, lines 47-51 of Baar.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stamos in view of U.S. Patent No. 4, 971,563 to Wells, III. Stamos discloses the method for electrically connecting components as substantially claimed (see the above rejection to claim 17 and 18), except for attaching a characteristically different backplane. Wells, III teaches providing a modular backplane assembly for computers (see Figs. 1-3), wherein one backplane module (Fig. 2) is replaceable with a characteristically different backplane module (see Fig. 3) for use in the same computer system.

Art Unit: 2835

It would have been obvious to one of ordinary skill in the art at the time the invention was made to electrically connect components in the system of Stamos utilizing a modular backplane assembly, wherein a first backplane is replaced by a characteristically different second backplane, as taught by Wells, III, since the device of Wells, III facilitates conversion among a plurality of modules and allows for upgrades to the system of Stamos in a cost efficient manner.

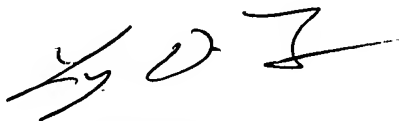
### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Q. Edwards whose telephone number is 571-272-2042. The examiner can normally be reached on M-F (7:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild can be reached on 571-272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 17, 2005  
aqe

  
**LYNN FEILD**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**